



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,242	03/30/2004	Roger G. Sellers	FMWW 8815US	4836
1688	7590	09/14/2005		EXAMINER
POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERSCOURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615			AMIRI, NAHID	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/813,242	SELLERS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Nahid Amiri	3679	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 30 March 2004.

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) 12 is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-11 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 30 March 2004 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date *30 March 2004*.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: *exhibit*.

**DETAILED ACTION*****Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-11, drawn to a movable joint, classified in class 403, subclass 137.
- II. Claim 12, drawn to method of assembling a compression load joint, classified in class 29, subclass 592.

Inventions of group I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the joint of group I can be assembled by providing a separate plate member attached to the housing end instead of deforming a rim portion of the housing.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Edmond Anderson August 22, 2005 a provisional election was made to Group I, claims 1-11 with oral traverse to prosecute the movable joint. Affirmation of this election must be made by applicant in replying to this Office action. Claim 12 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 2,635,906 Graham et al., in view of US Patent No. 5,997,208 Urbach et al., and further in view of US Patent No. 3,951,557 Herbenar.

In regard to claims 1, 4 and 6: Graham et al., disclose a joint assembly (10) (Figs. 1-2) (column 2, lines 34-40) including a metal housing (11) having a side wall which defines a central bore having a closed end and an open end; a movable member (12) having a head end portion (12a) disposed in the central bore and a shank portion (12b-12d) extending from the head end portion (12a), the head end portion (12a) engaging the central bore of the metal housing (11), the shank portion (12b-12d) being at least partially disposed outside of the central bore; an annular metal upper bearing (13) disposed about the movable member (12) within the central bore, the annular metal upper bearing (13) having an inner surface engaging the head end portion (12a); an annular cover plate (15) disposed about the movable member (12) and secured within the central bore; a spring member (14) compressed between the annular cover plate (15) and an upper surface of the annular upper bearing (13); and wherein the spring member exerts an axial preload force on the annular metal upper bearing (13) toward the closed end of the central bore, and the head end portion (12a) simultaneously. Graham et al., do not disclose having an annular metal upper bearing is configured to engage the side wall, having a metal lower bearing disposed within the central bore, the metal lower bearing being retained within the central bore by an interference fit, and the upper bearing having a split segment linking the inner surface with the outer surface. Urbach et al., teach ball joint assembly (10) (Fig. 2) having a lower metal bearing (22) being disposed within the central bore. Herbenar teaches (Fig. 3) a ball joint having a bearing (22) having a split segment (40) linking the inner surface (43) an outer surface (28), wherein the annular metal upper bearing (21) is configured to engage the side wall. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the housing of Graham et al., with a metal lower bearing as taught by Urbach et al., in order to enclose

bearing as taught by Urbach et al., in order to enclose the head end portion of a ball stud and help prevent wear. It would have also been obvious to one of ordinary skill in the art at the time of invention was made to provide the upper bearing of Graham et al., with a split segment, and having the upper bearing to engage the side wall as taught by Herbenar in order to construct a bearing which is circumferentially expansible and contractable.

In regard to claim 2: Graham et al., disclose (Fig. 3) having a lubrication port at side of the housing. Graham et al., do not disclose having an axial lubrication port disposed in the closed end of the central bore. Urbach et al., teach (Fig. 2) the metal housing (12) further includes an axial lubrication port (P) (see attachment) disposed in the closed end (E) of the central bore. It would have been obvious to one of ordinary skill in the art at the time of invention was made to move the lubrication port of the Graham et al., to the closed end of the central bore as taught by Urbach et al., in order to have lubrication port with easy access from lower part of the housing.

In regard to claims 3 and 5: Graham et al., disclose (Fig. 2) that the annular cover plate (15) and spring member (14) are composed of metal, and the annular metal upper bearing (13) is axially displaceable within the central bore.

In regard to claim 7: Graham et al., discloses a claimed invention except for having a dust boot restrictor disposed about the shank portion. Urbach et al., teach (Fig. 1) having a dust boot restrictor (R) (see attachment) disposed about the shank portion (12b-12d). It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the shank portion of Graham et al., with a dust boot restrictor as taught by Urbach et al. in order to restrict the movement of the shank portion.

In regard to claim 8: Graham et al., disclose the claimed invention except for having a flexible dust cover coupled between the housing and the shank portion of the movable member. Urbach et al., teach (Fig. 1) a flexible dust cover (60) coupled between the housing (12) and the shank portion (34) of the movable member (32). It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide Graham et al., with a dust cover as taught by Urbach et al., in order to seal the open upper end of the housing.

In regard to claim 9: Graham et al., and Urbach et al., disclose the claimed invention except for the lower metal bearing including at least one lubrication slot disposed on an inner bearing surface; and wherein said annular metal upper bearing includes at least one lubrication slot disposed on an inner bearing surface. Herbenar teaches (Fig. 3) (column 3, lines 57-57) the annular metal bearing (22) includes at least one lubrication slot (42) disposed on an inner bearing surface (43). It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the inner surface of the annular metal bearing of Graham et al., in view of Urbach et al., with at least one lubrication slot as taught by Herbenar in order to provide a passage for purpose of lubrication.

In regard to claim 10: Graham et al., disclose (Fig. 1) the housing (11) includes a deformable annular region adjacent the open end of the central bore, the deformable annular region adapted for radially inward deformation to secure the annular cover plate (15) within the central bore.

In regard to claim 11: Graham et al., disclose the claimed invention except the annular cover plate including a chamfered inner surface to restrict articulation of the movable member. It would have been an obvious matter of design choice to provide the annular cover plate of Graham with a chamfered inner surface in order to restrict the movement between the movable member and the housing, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 3,220,755      Gottschald et al.

US Patent No. 3,128,110      Herbenar

US Patent No. 6,010,271 Jackson et al.

US Patent No. 6,840,697 B1 Dorr

US Patent No. 5,564,853 Maughan

US Patent No. 6,371,682 B1 Maughan

Gottschalsd et al., '755 teach a bearing with split end, Herbenar '110 teaches a bearing with split end and lubrication grooves provided in the inner surface, Jackson et al., '271 teach a bearing lower bearing within a housing, Maughan '853 teaches a joint assembly having a lower bearing within a housing, and Maughan teaches '682 teaches a joint assembly with a dust boot.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Nahid Amiri  
Examiner  
Art Unit 3679  
August 22, 2005



DANIEL P. STODOLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

